WHAT IS CLAIMED IS:

1. A structure supporting a differential rotatably, comprising:
an inner ring arranged at said differential;
an outer ring arranged at an external peripheral portion formed to surround said differential; and
a rolling element rolling between said inner ring and said outer ring, wherein at least one of said inner ring, said outer ring and said rolling element has a carbo-nitrided layer and has an austenite grain number falling within a range exceeding 10.

2. The structure of claim 1, wherein said differential is supported by a tapered roller bearing rotatably.

3. The structure of claim 1, wherein said differential is supported by a deep groove ball bearing rotatably.

4. A structure supporting a differential rotatably, comprising:
an inner ring arranged at said differential;
an outer ring arranged at an external peripheral portion formed to surround said differential; and
a rolling element rolling between said inner ring and said outer ring, wherein at least one of said inner ring, said outer ring and said rolling element has a carbo-nitrided layer and provides a fracture stress value of no less than 2650 MPa.

5. The structure of claim 4, wherein said differential is supported by a tapered roller bearing rotatably.

6. The structure of claim 4, wherein said differential is supported by a deep groove ball bearing rotatably.

7. A structure supporting a differential rotatably, comprising:

an inner ring arranged at said differential;

an outer ring arranged at an external peripheral portion formed to surround said differential; and

a rolling element rolling between said inner ring and said outer ring, wherein at least one of said inner ring, said outer ring and said rolling element has a carbo-nitrided layer and has a hydrogen content of no more than 0.5 ppm.

8. The structure of claim 7, wherein said differential is supported by a tapered roller bearing rotatably.

9. The structure of claim 7, wherein said differential is supported by a deep groove ball bearing rotatably.

10. A component of a differential including a gear capable of operating two wheels at different rates, respectively, and a shaft linked to said gear, said component having a nitrogen enriched layer and an austenite grain size number exceeding 10.

11. A component of a differential including a gear capable of operating two wheels at different rates, respectively, and a shaft linked to said gear, said component having a nitrogen enriched layer and providing a fracture stress value of no less than 2650 MPa.

12. A component of a differential including a gear capable of operating two wheels at different rates, respectively, and a shaft linked to said gear, said component having a nitrogen enriched layer and a hydrogen content of no more than 0.5 ppm.

13. A method of manufacturing a structure supporting a differential rotatably, including an inner ring arranged at said differential, an outer ring arranged at an external peripheral portion formed to surround said differential, and a rolling element rolling between said inner

ring and said outer ring, wherein steel is carbo-nitrided at a temperature higher than an A_1 transformation point and then cooled to a temperature lower than said A_1 transformation point, and the steel is subsequently again heated to a range of temperature of no less than said A_1 transformation point and less than said temperature applied to carbo-nitride the steel and the steel is then quenched to produce at least any one of said inner ring, said outer ring and said rolling element.

14. The method of claim 13, wherein said range of temperature is 790°C to 830°C.

15. A method of manufacturing a component of a differential including a gear capable of operating two wheels at different rates, respectively, and a shaft linked to said gear, wherein steel is carbo-nitrided at a temperature higher than an A_1 transformation point and then cooled to a temperature lower than said A_1 transformation point, and the steel is subsequently again heated to a range of temperature of no less than said A_1 transformation point and less than said temperature applied to carbo-nitride the steel and the steel is then quenched to produce said component.

16. The method of claim 15, wherein said range of temperature is 790°C to 830°C.